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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,250	09/22/2003	Junichi Matsumoto	242958US2	9520
22850	7590	04/18/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LEE, PETER	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/666,250	Applicant(s) MATSUMOTO ET AL.	
	Examiner Peter Lee	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 09 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welch et al. (US pn 6311745) in view of Terazawa et. al. (US pre-grant publication 2001/0017998).

Welch teaches a powdered toner dispensing system (fig. 1 part 10) comprising: a dispensing container to hold the toner (Fig. 1 part 12) (ie. powder storing body) with an outlet (fig. 1 part 38) (ie. opening) at one end, a first portion of the valve (fig. 4 part 62) (ie. a base member) that is affixed to the bottom end of the dispensing container comprised of said outlet (note col. 5 lines 54-60), wherein said first portion of the valve works in conjunction with a second portion of the valve (fig. 4 part 64) (ie. outlet member), which is formed with a passage configured to transfer the powder from said dispensing container to an outlet of the dispensing container (fig. 3 part 38; note: col. 3 lines 60-63 and col. 5 lines 56-60) and has a valve to close and open (fig. 4 part 60; note col. 6 lines 1-5) (ie. shutter function) for selectively allowing passage through said outlet passage, with the second valve portion (ie. outlet member) to be easily coupled and then easily separated from first valve portion (col. 6 lines 5-8) (ie. connected to or disconnected to base member).

Welch further teaches said first valve portion (fig. 4 part 62) (ie. base member) comprising of a powder passage (fig. 3 part 38) that allows the powder to pass there through, and the said passage has an opening area (this opening area is understood to be the opening due to the second valve portion that will encompass a separate receiving container as seen in fig. 5 part 64) larger than an open area of said first valve portion (this is seen in fig. 5 when the first valve portion 62 is seen to fit into the second valve portion 64, and the flip member 76 opens up with a smaller diameter than the opening of the second valve member 64).

Welch teaches the second valve portion (ie. outlet member/first part selectively connectable to said base member) having a second disk (part 70) fitted within the second valve portion, being part of the mechanism that provides a shutter device for controlling the toner flow.

Welch also further teaches the powder passage having an opening area (fig. 3 part 38), as measured in a plane perpendicular to a direction of flow of said powder in said powder path, and the dispensing container having lower walls that decrease in diameter in the downward direction towards the outlet of the container (col. 3 lines 60-64) (ie. decreasing from said opening of said powder storing member toward said outlet member).

Welch does not teach the dispensing container being made of a flexible material. Welch also does not teach the flexible material being used to comprise sheets to constitute side and top wall portions that are foldable inwards.

It is Terazawa who teaches a box member (fig. 1 part 30) (ie. body member) of a toner container (fig. 1 part 1) being comprised of a powdered toner deformable bag (fig. 1 part 2) (ie. powder storage body). The said toner bag is comprised of a single flexible sheet of polyethylene (page 2 paragraph [0046]) that constitute side walls (ie. side surfaces) when the mouth member

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(fig. 1 part 3; note this mouth member is referenced to indicate where the first valve portion taught in Welch would be) (ie. base member) is positioned at a bottom position, and this same sheet member constitutes a top portion of the toner bag (ie. sheet member constituting a top). The said top portion of the toner bag is comprised of folded portions (fig. 1 part 10; note page 3 paragraph [0054]), which along with the foldable portions shown by the dashed line on the side walls of the body portion (fig. 1 part 6), will allow the toner bag to be foldable inwards.

Terazawa further teaches the flexible sheet forming a tapered portion (fig. 1 part 7) (ie. inclined toward said base member little by little) that is contiguous with the body portion of the bag and ends with the tapered outlet at the mouth of the bag (page 2 paragraph [0046]). The toner containing bag taught by Terazawa is built so as to prevent "buckle" in the bag structure as seen in Fig. 3 (paragraph [0048] and [0049]). By retarding the buckle in the toner bag, the toner bag succeeds in keeping an angle between each of the inner surfaces and a horizontal plane greater than an angle of repose of when the toner is packed in said toner bag (toner filled bag seen in Fig. 2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the toner dispensing container (part 12) as taught by Welch to be a flexible bag-like powder container body as taught by Terazawa.. One of ordinary skill in the art would have been motivated to use the flexible bag-like toner container body capable of being foldable inwards because the toner container then becomes easier to handle than a traditionally hard case would, and the flexible bag-like container takes up a minimum of space which is a desirable trait (Terazawa page 5 paragraph [0079]).

As to claim 4, Examiner takes official notice that it is well known in the art for the base member to be made into a variety of shapes, including rectangular or circular shapes. It is also noted that for the application it is being used for, the particular shape of the base member does not warrant criticality. One of ordinary skill in the art would have found it obvious to allow such a base member to be made from a variety of shapes ranging from the circular base as seen in Welch, to the rectangular as seen in the current application. Further, since there is no basis of criticality regarding the shape of the base member given by the applicant in the disclosure, this particular limitation regarding the rectangular shape will not be considered. It is further viewed that with such a rectangular base member, the other limitations of the claim dealing with the a pair of side surfaces, which face each other, substantially parallel to a front and a rear surface of said powder storing body, and a width between a right and a left surface of said powder storing body is smaller than a width between said pair of side surfaces of said base member will be taught by the powdered toner dispenser taught by the reference Welch.

2. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welch in view of Terazawa, and further in view of Beaufort et al. (US pn 5594535).

Welch teaches a refillable toner dispensing container (container is said to have an opening through which powder can be filled; fig. 1 part 32) (ie. toner storing body) formed with a valve opening at one end (fig. 4 part 60; col. 5 lines 55-50) (ie. open portion at one end); a toner stored in said toner container (abstract 1st sentence); an outlet configured to discharge the toner from said toner container (fig.1 part 38; col. 3 lines 60-63); a second valve portion (part 64) (ie. outlet member) formed with the outlet passage configured to deliver the toner from said

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powder container to an outlet, and when connected to a first valve portion having a range of open and shut positions is possible (note col. 6 lines 13-24) (ie. shutter function) for selectively blocking or unblocking said passage; and a first valve portion (fig. 4 part 64) (ie. base member) affixed to said first valve portion (ie. open portion) of said toner container and configured to be selectively locked or unlocked (ie. connected to or disconnected) from said second valve portion (ie. outlet member) (col. 6 line 1-8).

Welch does not teach the toner dispensing container to be part of a toner cartridge.

It is Terazawa who teaches the use of a powdered toner deformable bag (fig. 1 part 2) (ie. powder storage body), the toner deformable bag being made of a single flexible sheet of polyethylene (page 2 paragraph [0046]). And further it is Beaufort who teaches a refillable toner cartridge that employs a flexible toner bag similar to that found in Terazawa (fig. 2 part 85; col. 2 lines 20-24 and col. 4 lines 4-6).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the toner dispensing container (part 12) as taught by Welch to be a flexible bag-like powder container body as taught by Terazawa. One of ordinary skill in the art would have been motivated to use the flexible bag-like toner container body capable of being foldable inwards because the toner container then becomes easier to handle than a traditionally hard case would, and the flexible bag-like container takes up a minimum of space which is a desirable trait (Terazawa page 5 paragraph [0079]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to make the powdered toner dispenser container (part 12) taught by Welch, with the flexible toner bag taught by Terazawa, to be part of a toner cartridge as taught in

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Beaufort. One of ordinary skill in the art would have been motivated to have the toner dispenser container (part 12) taught by Welch be part of a cartridge apparatus as taught by Beaufort because the cartridge layout allows for easy replacement of certain parts of an electrophotographic image machine to be replaced, namely the toner replacement (col. 1 lines 50-60).

Response to Amendment

Amendments made to the specification and claims have been entered by the Examiner.

Response to Arguments

3. Applicant's arguments filed on February 9, 2005 have been fully considered but they are not persuasive.

Examiner acknowledges the applicant's concern on page 9 of the response that the second valve portion being taught by Welch (ie. outlet member) is said to be part of a receiving container and thus not part of the dispensing container (ie. powder storing body). However, Examiner views the claimed invention of the applicant to have a similar two part structure as that of Welch. In the applicants specification, it is taught that the mouth member (part 30) is actually composed of two parts: an upper/base member (part 37) and an inner/lower part (part 45 and 46). It is the inner/lower part that is being claimed as the outlet member in the claims. Welch teaches the first valve portion being affixed to the container (part 12), as the applicant teaches the upper/base member being affixed to the powder supply container (part 21). Likewise, Welch

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teaches the second valve portion to be detachable from the first valve portion, yet still being part of an overall valve portion to perform a shutter operation (col. 5 lines 54-63) just as the applicant teaches the inner/lower part being detachable from the upper/base member yet still being combined to form the mouth member (part 30) to perform a similar shutter function.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case:

As to the arguments regarding claim 5 found on the bottom half of page 9, Examiner would like to point out that applicant has mistakenly found the flexible tone bag taught by Terazawa to be analogous to the flexible toner storage bag (part 18) taught by Welch. It is the intention of the Examiner to have the flexible tone bag taught by Terazawa to be analogous to the toner dispensing container (part 12) taught by Welch. The new rejections have been modified to better explain the analogous parts between the combined references, and therefore should better show the reasons for combining.

As to the arguments regarding claim 8 found in the third paragraph on page 10 of the response, applicant has again has mistakenly found the flexible tone bag taught by Terazawa to be analogous to the flexible toner storage bag (part 18) taught by Welch. It is the intention of the Examiner to have the flexible tone bag taught by Terazawa to be analogous to the toner

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dispensing container (part 12)-taught by Welch. The new rejections have been modified to better explain the analogous parts between the combined references, and therefore should better show the reasons for combining. Also, Examiner has explained above how Welch teaches the limitations of an outlet member being selectively connectable to a base member.

As to newly added claims 10-12, the limitations present in the new claims are seen to be taught by the prior art references of record and have been explained as such in the art rejections above.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Lee whose telephone number is 571-272-2846. The examiner can normally be reached on mon-fri 9:00 am-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pl 4/11/05

A handwritten signature in black ink, appearing to read 'A. Grimley', with a long horizontal flourish extending to the right.

ARTHUR T. GRIMLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800